

# Attitudes toward physician-assisted suicide among physicians in Vermont

Alexa Craig, Beth Cronin, William Eward, James Metz, Logan Murray, Gail Rose, Eric Suess, Maria E Vergara

*J Med Ethics* 2007;33:400–403. doi: 10.1136/jme.2006.018713

See end of article for authors' affiliations

Correspondence to: M E Vergara, University of Vermont College of Medicine, 89 Beaumont Ave, Given Building, Burlington, VT 05405, USA; maria.vergara@uvm.edu

Received 19 July 2006  
Accepted 8 August 2006

**Background:** Legislation on physician-assisted suicide (PAS) is being considered in a number of states since the passage of the Oregon Death With Dignity Act in 1994. Opinion assessment surveys have historically assessed particular subsets of physicians.

**Objective:** To determine variables predictive of physicians' opinions on PAS in a rural state, Vermont, USA.

**Design:** Cross-sectional mailing survey.

**Participants:** 1052 (48% response rate) physicians licensed by the state of Vermont.

**Results:** Of the respondents, 38.2% believed PAS should be legalised, 16.0% believed it should be prohibited and 26.0% believed it should not be legislated. 15.7% were undecided. Males were more likely than females to favour legalisation (42% vs 34%). Physicians who did not care for patients through the end of life were significantly more likely to favour legalisation of PAS than physicians who do care for patients with terminal illness (48% vs 33%). 30% of the respondents had experienced a request for assistance with suicide.

**Conclusions:** Vermont physicians' opinions on the legalisation of PAS is sharply polarised. Patient autonomy was a factor strongly associated with opinions in favour of legalisation, whereas the sanctity of the doctor–patient relationship was strongly associated with opinions in favour of not legislating PAS. Those in favour of making PAS illegal overwhelmingly cited moral and ethical beliefs as factors in their opinion. Although opinions on legalisation appear to be based on firmly held beliefs, approximately half of Vermont physicians who responded to the survey agree that there is a need for more education in palliative care and pain management.

Physician-assisted suicide (PAS) has been actively debated in the US for over a decade. In 1997, the United States Supreme Court rejected the notion that a constitutional right exists to either PAS or euthanasia<sup>1 2</sup> and, as a result of this decision, relegated the issue of PAS and euthanasia to individual state legislatures. Between 1991 and 2000, voters in Washington, California, Maine and Hawaii defeated initiatives to legalise PAS. Conversely, Oregon voters in 1994 passed the Oregon Death with Dignity Act, thus becoming the first and only US state in which PAS is legal.<sup>3 4</sup> In Vermont, the PAS debate came to the forefront in 2002. Legislation closely modelled after the Oregon Death with Dignity Act was proposed to legalise PAS for mentally competent adults who, having terminal illness, have a life expectancy of <6 months.<sup>5</sup>

Surveys have been conducted across the country to assess physicians' opinions on PAS and euthanasia. Results of these surveys have shown that physicians are deeply polarised.<sup>6–9</sup> Assessments thus far have surveyed physicians grouped by specialty<sup>7 8</sup> and/or affiliation with professional organisations.<sup>6</sup> Subject criteria often exclude many physicians, especially retired physicians.<sup>6 9 10</sup> The results of these surveys may not be representative of the Vermont physicians' opinions; therefore further study is likely to benefit the debate initiated by the pending Vermont legislation.

To more accurately assess physicians' opinions in Vermont, our study examined the attitudes of all allopathic and osteopathic physicians licensed by the state of Vermont, including those who are retired and those who are not currently practising medicine. Our survey was designed to assess whether clearly defined variables—gender, specialty, location of practice, whether the physician is currently practising, whether patients are cared for through the end of life and whether the physician has experience with patient requests for PAS—were predictive

of physician support of the proposed PAS legislation in this predominantly rural state.

## METHODS

### Study design

An initial mail was sent in July 2003 to all 2770 physicians licensed by the state of Vermont. Contact information for those physicians was obtained from the Vermont Board of Medical Practice and the Vermont Board of Osteopathic Physicians. The mail included a covering letter describing the study and its sponsors, an anonymous survey with a stamped, self-addressed return envelope, and an accompanying coded postcard to be returned independently of the survey. The coded postcard allowed respondents to be excluded from subsequent mails while ensuring anonymity. The questionnaire contained no numbers or other identifying information that could link the responses to specific persons. A reminder postcard was sent 2 weeks after the first mail. This was followed by a second mail of the survey to physicians who had not responded to the first request. The final deadline for receipt of the survey responses was 15 October 2003. Our method was similar to the process used in previous studies on this issue.<sup>9 10</sup>

### Questionnaire

The survey was designed by a group of University of Vermont medical students in collaboration with university-affiliated physicians and other faculty from a variety of specialties. To limit the survey bias, there were no gender associations or extraneous subjective facts included in the survey. To avoid emotionally charged language, the phrase “physician-assisted suicide” was not used. Instead, survey questions used

**Abbreviation:** PAS, physician-assisted suicide

**Table 1** Respondent demographics

Mean age of respondents	53.6 years
Gender	
Male	70.6
Female	26.3
Declined to answer	3.1
Specialty	
Primary care*	50.5
Not under primary care	49.5
Currently practising	
Yes	80.4
Retired	14.9
Declined to answer	4.7
Location of practice	
Chittenden county†	56.9
Outside Chittenden county	43.1
Care for patients through end of life	56.7

\*Family practice, internal medicine, paediatrics, obstetrics/gynaecology.

†Largest county in Vermont, population 149 613<sup>11</sup>.

All values are given as percentages unless specified otherwise.

descriptive language as is stated in the proposed Vermont legislation. Survey questions referred to a prescription of a lethal dose of drugs given to a patient who is mentally competent with terminal illness and a life expectancy of <6 months.<sup>3</sup> The survey and research protocol was reviewed and approved by the University of Vermont Institutional Review Board.

### Statistical analysis

Physician responses were encoded by hand into a computer database. Data entry was verified on a randomly selected 1% of questionnaires, with no errors detected. Statistical analyses were performed with the assistance of Academic Computing Services, University of Vermont, Vermont, USA. Using SPSS V.12 for Windows, frequencies were assessed for all 22 questions and cross-tabulated with factors such as gender, location of practice, retired versus practising physicians, and so on, and  $\chi^2$  tests were used to assess the differences in response between subgroups.

### RESULTS

If significance is indicated in the results given below, the test was significant at  $p < 0.01$  and not significant at  $p > 0.05$ .

#### Respondent demographics

Of the 2770 surveys initially mailed, 561 surveys were undeliverable and 1052 completed surveys were returned by the deadline, giving a 48% response rate. The mean range age of the respondents was 53.6 (22–90) years. Of the respondents, 70.6% were male, 26.3% were female and 3% preferred not to identify themselves by gender. The two most highly represented specialties were family medicine (16.6%) and internal medicine (16.2%). Currently practising physicians comprised 80.4% of the respondents, whereas 14.9% were retired. Respondents from Chittenden county made up 56.9%, whereas those from all

other counties made up 43.1%. More than half of the respondents (56%) care for patients through the end of life (table 1).

#### Opinions regarding legalisation of physician-assisted suicide

We found that 38.2% of Vermont physicians believed that prescription of a lethal dose of drugs that was repeatedly requested by an adult patient who is mentally competent with terminal illness and a life expectancy of <6 months should be legalised. However, 16% believed it should be illegal, 26% believed it should not be legislated, 15.7% were undecided and 4.2% chose not to answer this question (table 2).

#### Demographic factors associated with opinion on legislation of physician-assisted suicide

The mean age of physicians was not significantly different among those with differing opinions on the legalisation of PAS. In contrast, respondent gender did affect PAS opinion: male physicians were significantly more likely to favour legalisation (42% males vs 34% females), whereas female physicians were more likely to be “undecided” (23% females vs 14% males). No significant differences were observed when primary care physicians’ opinions were compared with specialists’ opinions, or when the opinions of physicians practising in Chittenden county were compared with those practising elsewhere in the state. Significant differences were observed when retired physicians’ opinions were compared with those of physicians currently practising. Retired physicians were more likely to favour legalisation of PAS than their practising counterparts (54% vs 37%; table 3).

#### Caring for patients with terminal illness

Physicians who did not care for patients through the end of life were significantly more likely to hold the opinion that PAS should be legalised (48%), whereas physicians who did care for patients with terminal illness (33%) are less likely to hold the opinion that PAS should be legalised (table 3).

#### Experience with patient requests for lethal prescriptions

Of the physicians who have had experience with previous requests for PAS, 44% support legalisation, whereas only 36% of physicians who have not had experience of patient requests for PAS support legalisation (table 3). Of the Vermont physicians, 30% have experienced a request for PAS from an adult who is mentally competent with a terminal illness, and 40% suspected that they have had patients with terminal illness who might have desired PAS but did not request it.

#### The practice of physician-assisted suicide

In response to a question addressing the practice of PAS under a law such as the one put forth to the Vermont state legislature, 50.1% of the respondents said they would participate in PAS, 37.7% said they would not participate and 12.2% were uncertain or did not respond. Of retired physicians, 60% stated they would participate in PAS if a law was passed compared with 47.6% of currently practising physicians. Furthermore, 53.3% of physicians who do care for patients with terminal illness stated they would participate in PAS if it were legal. By contrast, 44.7% of physicians who do not routinely care for patients with terminal illness said they would participate in PAS if it was made legal (table 4).

#### Factors influencing opinions on legalisation of physician-assisted suicide

Of the physicians supporting legalisation, 92.9% cited patient autonomy as a factor in their decision and 82% also cited

**Table 2** Overview of positions on legalisation of physician-assisted suicide

Position on legalisation (%)	
Should be legalised	38.2
Should not be legislated	26.0
Should be illegal	16.0
Undecided	15.7
Did not answer	4.2

**Table 3** Breakdown of demographic data by position on the legalisation of physician-assisted suicide

Position on legalisation	Legal	Illegal	Not legislated	Undecided	Total
Mean age (years)	56	51	53	50	53.6
Gender, n (%)					
Female	91 (34)	37 (14)	76 (29)	61 (23)	265
Male	303 (42)	131 (18)	193 (27)	98 (14)	725
Specialty, n (%)					
Primary care	164 (35)	84 (18)	137 (30)	78 (17)	463
Not primary care	200 (42)	74 (16)	118 (25)	80 (17)	472
Location of practice, n (%)					
Chittenden county	148 (37)	75 (19)	111 (28)	61 (15)	395
Other county	205 (39)	85 (16)	144 (28)	88 (17)	522
Currently practising, n (%)					
Yes	302 (37)	150 (18)	229 (28)	144 (18)	825
Retired/no	104 (54)	23 (12)	45 (23)	22 (11)	194
Cares for patients through the end of life, n (%)					
Yes	191 (33)	110 (19)	184 (32)	95 (16)	580
No	189 (48)	58 (15)	85 (22)	63 (16)	395
Experience with patient request, n (%)					
Yes	128 (44)	39 (14)	84 (29)	37 (13)	288
No	239 (36)	128 (19)	187 (28)	119 (18)	673

intractable pain. Of the physicians who believed that PAS should be illegal, moral and ethical beliefs were a factor for 84.3%, and potential for misuse was a factor for 62.8%. We found that physicians in favour of not legislating PAS were most likely to cite doctor–patient relationship (74.3%) and moral and ethical beliefs (75%) as factors influencing opinion.

### Need for additional training

In all, 49% of the physicians stated that they would benefit from additional training in pain management. More than half of the respondents (52.3%) felt that they would benefit from additional training in end-of-life care issues.

## DISCUSSION

The purpose of this study was to assess the attitudes of Vermont physicians on the legislation of PAS. Many other studies explore the issue of PAS and euthanasia, but few solely address the issue of PAS. Our survey specifically addressed PAS as defined by the proposed Vermont state legislation.<sup>5</sup> We excluded the term euthanasia, as this term is not part of the proposed legislation.

Our primary results—38.2% of Vermont physicians support the legalisation of PAS, 16% support making PAS illegal and 26% support no legislation on the issue—are comparable with the previously published survey results.<sup>6–8 12</sup> However, we also found that 50.1% of physicians reported they would participate in PAS if it is legalised, whereas previous state and national surveys found that 25.5–36% of physicians would participate in

legalised PAS.<sup>7 10 13 14</sup> Our findings may reflect the fact that our survey included retired physicians who more strongly supported PAS than practising physicians, whereas the aforementioned surveys excluded retired physicians.

It is notable in our study that the number of physicians who would participate in PAS if it were legalised exceeds the number who voiced support for legalisation. A similar result was found in an earlier study among Michigan physicians.<sup>7</sup> These results suggest that some physicians who do not agree with the legislation would nonetheless perform PAS. This additionally holds true for the subset of physicians who care for patients with terminal illness: only 38% support legalisation, yet 53% would participate. This greater willingness to perform PAS among Vermont physicians who care for patients with terminal illness than among previously sampled physicians may be indicative of increased acceptance of PAS by physicians coupled with increased demand from patients. It may also reflect greater acceptance of PAS in Vermont—a state with a record of political liberalism on social issues.

Physicians' attitudes toward PAS are sharply polarised. In our study, we assessed seven variables that could potentially influence these attitudes. These variables were age, gender, specialty, location of practice, whether the physician was currently practising, whether a physician cared for patients with terminal illness and whether a physician had experience with patients requesting PAS. Retired physicians were significantly more likely to favour legalisation (54% retired physicians vs 37% currently practising physicians). This finding

**Table 4** Willingness to prescribe a lethal dose of drugs if physician-assisted suicide is legalised

If a law were passed legalising prescription of a lethal dose of drugs to a patient with terminal illness who is mentally competent and who requests it, are there circumstances in which you would make such a prescription?		
	Yes n (%)	No n (%)
All respondents	50	38
Not currently practising/retired	60	29
Currently practising	48	40
Cares for patients with terminal illness through end of life	53	36
Does not care for patients with terminal illness through end of life	45	42
Patient has requested assistance ending his/her life	67	24
Patient has not requested assistance ending his/her life	43	45



is similar to prior research that found increased age was associated with increased agreement with legalising PAS.<sup>14</sup> There could be a variety of explanations for why retired physicians in our study were more likely to support PAS legalisation, including the possibility that this issue may be more personally relevant to older physicians or that this population has had less experience with recent advances in pain control and palliative care.

Our research indicates that physicians who care for patients with terminal illness are less likely to favour legalisation of PAS. This finding is similar to other study results, which found that haematologists and oncologists, physicians who often deal with patients with terminal illness, tend to oppose the legalisation of PAS.<sup>9</sup> One possible explanation for this finding is that physicians who care for patients with terminal illness are more experienced with palliative care measures, and therefore believe that specific legislation directing their practice is not required; indeed, decreased support for euthanasia and PAS has been correlated with increased training and perceived knowledge in palliative care among haematologists and oncologists.<sup>11</sup>

Of the respondents, 30% had received at least one patient request for assistance in ending life. This compares with 18.3% of a nationwide sample of physicians,<sup>10</sup> 21% of Oregon physicians,<sup>8</sup> 7% of Connecticut physicians<sup>14</sup> and 26% of Washington State physicians.<sup>14</sup> The higher percentage of physicians receiving PAS requests in Vermont could be attributed to the recent increases in public awareness and discussion surrounding this issue. Interestingly, physicians who had received a specific patient request for PAS were more likely to support legalisation. As physicians who care for patients with terminal illness are, as a group, less supportive of legalisation, this finding suggests that patient demand may prove to be a significant factor in changing physicians' opinions.

We attempted to clarify the factors that influence physicians' opinions on the legalisation of PAS. Physicians in favour of legalisation overwhelmingly cited patient autonomy as a factor influencing their position, whereas those opposed to the legalisation of PAS cited moral and ethical beliefs as factors in their position. Those in favour of not legislating PAS cited the doctor-patient relationship as a factor in their position. This suggests that opinions on the legalisation of PAS may originate from different belief systems, much like other highly polarised issues in today's society.

Although the debate on PAS continues to be played out in the legislative forum and in the public arena, physicians will still be faced with the issue of how to provide the best care for patients with terminal illness. Intractable pain and patient control over the dying process are commonly cited by patients and physicians alike as arguments in favour of legalised PAS. Advances in pain management and palliative care have provided alternatives for terminally ill patients and their physicians. The implementation of these alternatives hinges on adequate training in pain management and palliative care. Our survey revealed a perceived need among Vermont physicians for more training. Our research highlights the need for more educational opportunities for Vermont physicians to address these issues so that they may take better care of their patients.

The strengths of our study include the fact that the entire population of Vermont-licensed physicians, and not a random sample from the population, was polled. Unlike other studies, we included retired physicians and all specialties. The design of the survey instrument was also a strong point of this research; neutral language was used. The limitations of the study include a response rate of 48%, which raises the possibility that only the physicians with the strongest opinions or a professional interest

in the issue responded. However, because of the large sample size (>1000), the power of the statistical tests was more than adequate to detect relatively small differences between subgroups of respondents. If it is true that only those with the strongest opinions responded, the power of these tests would only increase if those with less strong opinions had also responded. The anonymity of the survey was called into question by some participants, based on the possibility that they could be identified by their demographic data. However, our survey design anticipated this potential issue and was structured to allow participants to decline providing identifying characteristics. Despite this opportunity for physicians to choose not to reveal demographic data, some physicians may have chosen not to answer the survey at all on this basis. This might account for some of the survey non-response, and also might have contributed to some physicians' decisions not to answer some of the questions in the survey.

The implications of this research are that the opinions of Vermont physicians corroborate national opinions on this issue. Our findings contribute to a deeper understanding of some of the issues surrounding PAS. Specifically, we identified factors influencing physicians' opinions, and aspects of the PAS debate about which compromise is unlikely. This research also points to a need for further education for Vermont physicians on pain management and end-of-life care issues. Additional research needs to address the adequacy of palliative care and physician awareness of palliative care techniques.

## ACKNOWLEDGEMENTS

We thank the Vermont Medical Society for funding the project. We thank Mary Murray for her invaluable editorial assistance and Gentian Lluri for his guidance in the submission of the final manuscript.

## Authors' affiliations

Alexa Craig, Beth Cronin, William Eward, James Metz, Logan Murray, Gail Rose, Eric Suess, Maria E Vergara, University of Vermont College of Medicine, Burlington, Vermont, USA

Competing interests: None.

## REFERENCES

- 1 Vacco v Quill, 117 S. Ct. 2293, 1997.
- 2 Washington v Glucksberg, 117 S. Ct. 2258, 1997.
- 3 **Multnomah County Elections Division.** *Oregon Voters' Pamphlet Ballot Measure 16.* Portland Ore: Multnomah County Elections Division).
- 4 Sullivan A, Hedberg K, Fleming D. Legalized physician-assisted suicide in Oregon—the second year. *N Engl J Med* 2000;**342**:598–604.
- 5 **Vermont Senate.** *Vermont Death With Dignity Act, Senate Bill 112 and House Bill 318* Vermont: Vermont Senate..
- 6 Whiney SN, Brown BW, Brody H, et al. Views of United States physicians and members of the American Medical Association House of Delegates on physician-assisted suicide. *J Gen Intern Med* 2001;**16**:290–6.
- 7 Meier DE, Emmons C, Wallenstein S, et al. A national survey of physician-assisted suicide and euthanasia in the United States. *N Engl J Med* 1998;**338**:1193–201.
- 8 Emanuel EJ, Fairclough DL, Clarridge BC, et al. Attitudes and practices of U.S. oncologists regarding euthanasia and physician-assisted suicide. *Ann Intern Med* 2000;**133**:527–32.
- 9 Dillman DA. *Mail and telephone surveys: the total design method.* New York: Wiley, 1978.
- 10 Salant P, Dillman DA. *How to conduct your own survey.* New York: Wiley, 1994.
- 11 <http://quickfacts.census.gov/qfd/states/50/50007.html>, U.S. Census Bureau, accessed 20 March, 2007.
- 12 Curry L, Schwartz HI, Gruman C, et al. Physicians' voices on physician-assisted suicide: looking beyond the numbers. *Ethics Behav* 2000;**10**:337–61.
- 13 Bushwick B, Emrhein D, Peters K. A comparison of resident and faculty attitudes toward physician-assisted suicide and active voluntary euthanasia. *Fam Med* 2000;**32**:261–66.
- 14 Back AL, Wallace JL, Starks HE, et al. Physician-assisted suicide and euthanasia in Washington State. Patient requests and physician responses. *JAMA* 1996;**275**:919–25.